

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of the Claims:

Claims 1-50 (cancelled)

Claim 51 (currently amended): A method for screening for drug candidates capable of modulating the interaction of proteins of a protein complex, ~~the protein complex selected from the group consisting of the protein complexes of claim 1,~~ said protein complex being a first protein and a second protein, said protein complex comprising

- (a) a complex of the first protein and a second protein;
- (b) a complex of a fragment of said first protein and said second protein;
- (c) a complex of said first protein and a fragment of said second protein;
- (d) a complex of a fragment of said first protein and a fragment of said second

protein,

wherein said first protein is BAT3 and said second protein is selected from the group consisting of glypican, LRP2, LRPAP1, transthyretin, and APP;

said method comprising

- (i) combining the proteins of said protein complex in the presence of a drug to form a first complex;
- (ii) combining the proteins in the absence of said drug to form a second complex;
- (iii) measuring the amount of said first complex and said second complex; and
- (iv) comparing the amount of said first complex with the amount of said second complex,

wherein if the amount of said first complex is greater than, or less than the amount of said second complex, then the drug is a drug candidate for modulating the interaction of the proteins of said protein complex.

Claim 52 (original): The method of claim 51, wherein said screening is an *in vitro* screening.

Claim 53 (currently amended): The method of claim 51, wherein said complex is measured by binding with an antibody specific for said protein complexes.

Claim 54 (original): The method of claim 51, wherein if the amount of said first complex is greater than the amount of said second complex, then said drug is a drug candidate for promoting the interaction of said proteins.

Claim 55 (original): The method of claim 51, wherein if the amount of said first complex is less than the amount of said second complex, then said drug is a drug candidate for inhibiting the interaction of said proteins.

Claims 56-85 (cancelled)

Claim 86 (currently amended): A method for identifying a compound that binds to a protein in vitro, wherein said protein is selected from the group consisting of ~~the proteins of claim 1,~~ BAT3, glypican, LRP2, LRPAP1, transthyretin, and APP, said method comprising:

contacting a test compound with said protein for a time sufficient to form a complex and

detecting ~~for~~ the formation of a complex by detecting said protein or the compound in the complex,

so that if a complex is detected, a compound that binds to protein is identified.

Claims 87-136 (cancelled)

Claim 137 (new): The method in 51 further comprising screening of said drug candidate in an Alzheimer's disease model.

Claim 138 (new): The method in 137 wherein said Alzheimer's disease model is a cellular model.

Claim 139 (new): The method of 138 wherein said cellular model is an A β peptide secretion assay, neuronal survival assay, or neurite extension assay.

Claim 140 (new): The method of 138 wherein said cellular model is an A β peptide secretion assay.

Claim 141 (new): The method of 137 wherein said Alzheimer's disease model is a transgenic animal model.

Claim 142 (new): A method for screening for drug candidates capable of modulating the interaction of proteins of a protein complex, said interaction formed using the yeast two-hybrid system, said protein complex being a first protein and a second protein, said protein complex comprising

- (a) a complex of the first protein and a second protein;
- (b) a complex of a fragment of said first protein and said second protein;
- (c) a complex of said first protein and a fragment of said second protein;
- (d) a complex of a fragment of said first protein and a fragment of said second protein,

wherein said first protein is BAT3 and said second protein is selected from the group consisting of glypican, LRP2, LRPAP1, transthyretin, and APP;

said method comprising

- (i) combining the proteins of said protein complex in the presence of a drug to form a first complex;
- (ii) combining the proteins in the absence of said drug to form a second complex;
- (iii) measuring the amount of said first complex and said second complex; and
- (iv) comparing the amount of said first complex with the amount of said second complex,

wherein if the amount of said first complex is greater than, or less than the amount of said second complex, then the drug is a drug candidate for modulating the interaction of the proteins of said protein complex.

Claim 143 (new): The method of claim 142, wherein if the amount of said first complex is greater than the amount of said second complex, then said drug is a drug candidate for promoting the interaction of said proteins.

Claim 144 (new): The method of claim 142, wherein if the amount of said first complex is less than the amount of said second complex, then said drug is a drug candidate for inhibiting the interaction of said proteins.

Claim 145 (new): The method in 142 further comprising screening of said drug candidate in an Alzheimer's disease model.

Claim 146 (new): The method in 145 wherein said Alzheimer's disease model is a cellular model.

Claim 147 (new): The method of 146 wherein said cellular model is an A β peptide secretion assay, neuronal survival assay, or neurite extension assay.

Claim 148 (new): The method of 146 wherein said cellular model is an A β peptide secretion assay.

Claim 150 (new): The method of 145 wherein said Alzheimer's disease model is a transgenic animal model.

Claim 151 (new): The method of 145 wherein said Alzheimer's disease model is a transplacement animal model.